

## **IN THE CLAIMS**

Claims 1-17 are pending in this application. Please amend claims 11-12 as follows:

1. (Previously Presented) A network drawing system, comprising:
  - a first input unit designating a first query having terms belonging to a first category;
  - a second input unit designating a second query having terms belonging to a second category;
  - a data storage device storing terms belonging to a third category in a form of a table, the terms of the third category comprising terms from the first category and the second category;
  - a calculation device which calculates a relationship between the input first query and second query through a plurality of terms using the table stored in said data storage device, the table including a degree of association of a relationship between terms belonging to the third category; and
  - a display device displaying on a screen a network of terms connecting the first query and the second query through a chain of the plurality of terms based on a result of calculation made by said calculation device.
2. (Original) The network drawing system according to Claim 1, further comprising:
  - a third input unit for designating a drawing condition; and
  - said network being displayed according to said drawing condition.
3. (Original) The network drawing system according to Claim 1, wherein said data storage device further stores attributes of said terms.
4. (Previously Presented) The network drawing system according to Claim 1, wherein at least one of said first query and said second query includes a plurality of query terms.
5. (Previously Presented) The network drawing system according to Claim 1, wherein among routes connecting said first query and said second query, a route having the highest degree of a relationship between the first and second category terms is displayed by a highlight line.

6. (Original) The network drawing system according to Claim 1, wherein

    said first category is at least one of a disease name, a symptom, a protein name, a gene name, a compound name, a gene function and a protein's function; and

    said second category is at least one of the compound name, the protein name and the gene name.
7. (Previously Presented) The network drawing system according to Claim 1, wherein the relationship between said terms is extracted according to co-occurrence between terms or phrase patterns.
8. (Previously Presented) The network drawing system according to Claim 2, wherein the network of the terms is re-displayed interactively by changing the setting of said third input unit.
9. (Previously Presented) The network drawing system according to Claim 2, wherein the connection between the terms or editing for addition or deletion of a term itself can be conducted interactively by changing the setting of said third input unit.
10. (Original) The network drawing system according to Claim 1, further comprising a synonym dictionary for converting at least one query input through said first input unit or said second input unit into a standardized term.
11. (Currently Amended) The network drawing system according to Claim 1, wherein the relationship between said terms is displayed on the screen at the same time with other external analysis information about said terms.
12. (Currently Amended) The network drawing system according to Claim 1, wherein when said terms have hierarchies, said network to connect said queries is drawn using associated concept relationships and upper concept terms relationships thereof.
13. (Previously Presented) The network drawing system according to Claim 1, wherein said second category is a gene name, and said gene name is displayed along a

horizontal axis of said screen, and a lod score generated from a linkage analysis of said result of calculation made by said calculation device is displayed for each gene of the horizontal axis or together with information on a chromosome position.

14. (Previously Presented) The network drawing system according to Claim 1, wherein the relationship between said terms is displayed together with a result of gene clustering based on gene attributes, wherein the first query or second query is at least a gene with attributes.
15. (Previously Presented) The network drawing system according to Claim 1, wherein the first query or second query includes genes with attributes, and the genes are clustered based on said attributes, and similarity of said genes based on the network of terms is inconsistent with a result of said clustering,  
wherein, a route connecting the first query and the second query from the result of said calculation which are from a result of mis-clustering is displayed by a highlight line.
16. (Previously Presented) A network drawing method, comprising the steps of:
  - inputting a first query having terms belonging to a first category into a first input unit;
  - inputting a second query having terms belonging to a second category into a second input unit;
  - using a data storage device storing terms belonging to a third category in a form of a table, the terms of the third category comprising terms from said first category and said second category;
  - calculating a relationship between the input first query and second query through a chain of a plurality of terms by using the table stored in said data storage

device, the table including a degree of association of a relationship between terms belonging to the third category; and

displaying on a display device a network of terms connecting said first query and said second query through said plurality of terms according to a result of calculating the relationship.

17. (Previously Presented) The network drawing method according to Claim 16, wherein said data storage device is accessed through an Internet.